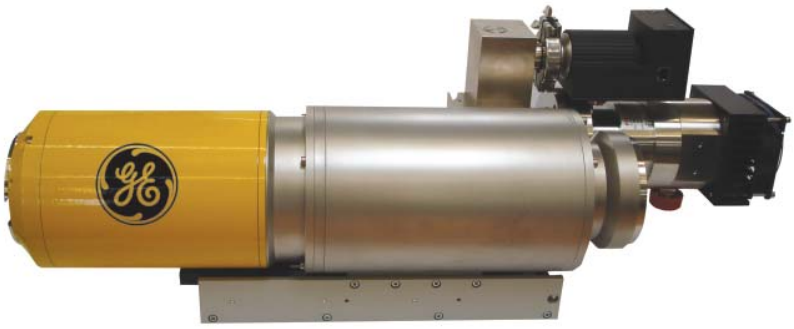
GE
Sensing & Inspection Technologies
phoenix|x-ray

phoenix diamond|window

Up to 2 times faster data acquisition at the same high image quality level



Option for all phoenix|x-ray transmission microfocus or high power nanofocus X-ray tubes up to 180 kV / 20 W

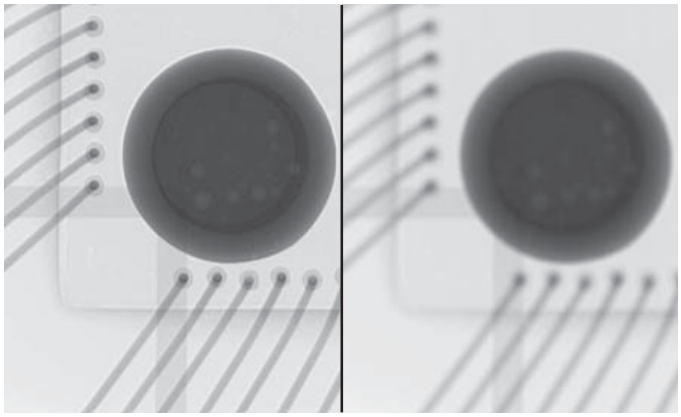
imagination at work

phoenix diamond|window

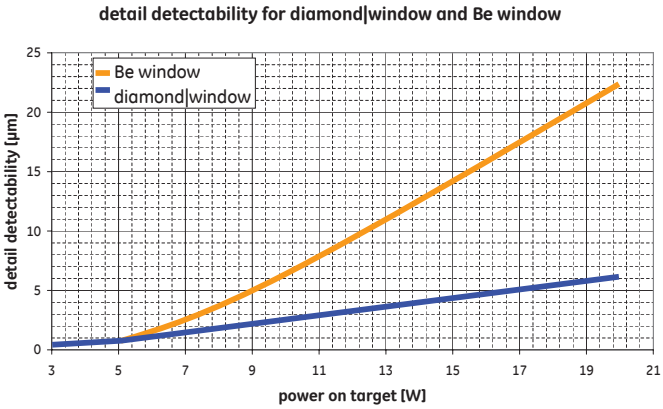
high output with high resolution

At higher applied power for X-ray generation, the focal spot has to be wider in order to prevent the target material from melting. Therefore, the inspection of small features with high absorbing materials using traditional transmission micro- or nanofocus tubes is limited either by power (almost no penetration resulting in noisy images or very long image acquisition time) or by resolution (increasing focal spot with power resulting in blurred images). To solve this, phoenix|x-ray offers its new CVD diamond|window – for the full range of its transmission X-ray tubes up to 180 kV. Due to its high thermal conductivity, the non-toxic diamond|window allows higher power on a smaller focal spot. This ensures high resolution even at a high output. The diamond|window can generate an image or CT acquisition up to 2 times faster with no degradation in image quality.

Comparison



diamond|window | conventional beryllium window



min. FOD (Focus-Object-Distance) 0.3 mm
(max. magnification of high power nanofocus X-ray tubes increased)
min. spot size like W/Be target

diamond|window - Your Advantages

- Up to 2 times faster data acquisition at the same high image quality level
- High output with high resolution
- Nontoxic target
- Improved focal spot position stability within long term measurements
- Increased target lifetime due to less degradation with higher power density
- diamond|window allows up to 20 W max. power (depending on system shielding and tube type)

www.phoenix-xray.com

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